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## (54) LOAD DETECTING APPARATUS FOR ELECTRICALLY-ASSISTED BICYCLE

## (57) Abstract:

PROBLEM TO BE SOLVED: To obtain an electrically-assisted bicycle in which the structure of a load sensor used to detect a period requiring electric assistance is made simple and small and in which the detecting accuracy of the sensor is increased.

SOLUTION: In an electrically-assisted bicycle, a foot-treading human-power driving system A and an auxiliary driving system B by a motor 21 are installed side by side. In the electrically-assisted bicycle, a slight gap is formed between a pedal-treading crankshaft and its bearing hole, the pedal-treading crankshaft is pressed to one side of the bearing hole by using a spring, and a detector is installed in such a way that it detects the displacement of the spring in a driving operation. When a force used to tread a foot-treading pedal is at a prescribed value or higher, a signal which asks electric assistance is issued.

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